
THE UNITED STATES DISTRICT COURT
DISTRICT OF UTAH

ZANE STRATTON,

Plaintiff,

v.

THOMPSON/CENTER ARMS, INC.;
SMITH & WESSON CORP.; SMITH &
WESSON HOLDING COMPANY;
CABELA'S WHOLESALE, LLC; AND
DOES I-X,

Defendants.

**MEMORANDUM DECISION
AND ORDER**

- **GRANTING IN PART AND DENYING IN PART MOTION TO PRECLUDE PLAINTIFF'S EXPERT CHARLES POWELL AND**
- **GRANTING IN PART AND DENYING IN PART MOTION FOR SUMMARY JUDGMENT**

Case No. 4:18-cv-00040-DN-PK

District Judge David Nuffer
Magistrate Judge Paul Kohler

This case arises out of a firearm explosion that occurred on September 6, 2016. Plaintiff Zane Stratton asserts various claims against Defendant Thompson/Center Arms, Inc. ("Thompson") for serious injuries resulting from the explosion of a muzzleloading rifle manufactured by Thompson. Defendant has filed a Motion for Summary Judgment¹ on all of Plaintiff's claims, as well as a Motion to Preclude Plaintiff's Expert Charles Powell ("Motion to Preclude").²

Summary judgment will be GRANTED in favor of Defendant on Plaintiff's claims for failure to warn, manufacturing defect, and breach of implied warranty for a particular purpose.

¹ [Docket no. 156](#), filed December 10, 2021.

² [Docket no. 154](#), filed December 10, 2021.

Plaintiff's request for punitive damages will also be dismissed. Summary judgment on Plaintiff's other claims will be DENIED.

Additionally, the Motion to Preclude will be GRANTED in part and DENIED in part.

Mr. Powell will be permitted to provide expert testimony on the cause of the rifle explosion.

However, Mr. Powell will be precluded from offering expert testimony on subjects which require expertise in warnings, external ballistics, or terminal ballistics. Mr. Powell will also not be permitted to testify to other gun barrel explosions where he has no personal knowledge. The prohibited opinions are identified in this order.

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UNDISPUTED MATERIAL FACTS³

1. In 2007 or 2008, non-party Jarron Glazier (“Glazier”) purchased an Omega Muzzleloading Rifle (“the Subject Rifle”) from either Cabela’s or Beaver Sport and Pawn.⁴
2. Omega Muzzleloading Rifles, including the Subject Rifle, are designed and manufactured by Defendant Thompson.⁵
3. The Omega was designed with a barrel manufactured from AISI 1137 steel (“1137 steel”).⁶
4. Omega rifles, including the Subject Rifle, were shipped with a manual which contained warnings and instructions on use.⁷
5. The manual contained a “limited warranty.”⁸
6. The warranty read, in relevant part, “THOMPSON/CENTER ARMS provides a warranty for all factory finished firearms for the LIFETIME OF THE ORIGINAL CONSUMER PURCHASER.”⁹

³ Defendant provided a “concise statement of the undisputed material facts” in its Motion, as required by [DUCivR 56-1\(b\)\(3\)](#) and cited “with particularity the evidence in the Appendix that supports each factual assertion.” Plaintiff did not respond as required by [DUCivR 56-1\(c\)\(3\)](#) by identifying any “specific facts the opposing party contends are genuinely disputed or immaterial.” The following Undisputed Facts are thus taken from the parties briefing on Defendant’s Motion for Summary Judgment: Motion for Summary Judgment at 3-12; Plaintiff’s Opposition to Defendant’s Motion for Summary Judgment (“Opposition to Summary Judgment”), [docket no. 173](#), filed Jan. 17, 2022, at 1-4; and the record. These Undisputed Facts contain facts that are not necessarily material, but nevertheless provide a more complete background of the events and circumstances to give context to the parties’ arguments. Those facts, or portions thereof, identified in the parties’ briefing that do not appear in these Undisputed Facts are either disputed; not supported by the cited evidence; not material; or are not facts, but rather, are characterization of facts or legal argument.

⁴ Motion for Summary Judgment at 9.

⁵ *Id.* at 4-6.

⁶ *Id.* at 4.

⁷ *Id.* at 6.

⁸ Omega Manual (2 of 2), Exhibit D to Motion for Summary Judgment, [docket no. 156-6](#), filed December 10, 2021, at 1.

⁹ *Id.*

7. Glazier shot the Subject Rifle approximately 10 times per year during his ownership with no apparent issue.¹⁰

8. In the summer of 2012, Plaintiff purchased the Subject Rifle from Glazier. Plaintiff also received the manual package, which included the written manual and a CD.¹¹

9. Plaintiff read the owner's manual after he purchased the rifle.¹²

10. Plaintiff estimates that between 2012 and 2016, he fired the Subject Rifle approximately 30 times per year without issue.¹³

The Incident

11. On September 6, 2016, Plaintiff and his brother went to Cedar Mountain, near Cedar City, Utah, to fire their muzzle-loading rifles.¹⁴

12. Plaintiff brought the Subject Rifle to fire.¹⁵

13. September 6th was the first day of the hunting season that Plaintiff shot the rifle.¹⁶

14. Plaintiff testified at a deposition that he cleaned the Subject Rifle prior to firing.¹⁷

15. Plaintiff testified that he loaded the Subject Rifle with black powder and a bullet (the "Subject Bullet"), seated the Subject Bullet with a ramrod, and removed the ramrod.¹⁸

¹⁰ Motion for Summary Judgment at 10.

¹¹ Motion for Summary Judgment at 10.

¹² *Id.*; Plaintiff's Deposition 9/2/19, Exhibit G to Motion for Summary Judgment ("Stratton Depo"), [docket no. 156-9](#) at 110:3–8.

¹³ Motion for Summary Judgment at 11.

¹⁴ *Id.* at 11; Stratton Depo at 66:23–67:7.

¹⁵ Motion for Summary Judgment at 11.

¹⁶ Stratton Depo at 68:15–69:14.

¹⁷ Motion for Summary Judgment at 11; Stratton Depo at 78:14–79:4.

¹⁸ Stratton Depo at 79:17–80:11, 84:4–12. Contrary to local rules, Defendant did not dispute Plaintiff's proposed statement of material fact that Plaintiff properly loaded and seated the bullet. However, it is clear from the record that Plaintiff's testimony is disputed by Defendant.

16. When Plaintiff pulled the trigger, the barrel of the Subject Rifle exploded, injuring his hands.¹⁹

PROCEDURAL HISTORY

In June 2018, Plaintiff filed a complaint asserting various claims against Thompson, Smith & Wesson Corp., Smith & Wesson Holding Company, and Cabela's Wholesale, LLC as a result of his injury.²⁰ Specifically, Plaintiff asserted claims for (1) strict liability failure to warn;²¹ (2) strict liability design defect;²² (3) strict liability manufacturing defect;²³ (4) negligence, including negligent failure to warn, negligent design, and negligent manufacturing of the rifle;²⁴ (5) breach of express warranty;²⁵ (6) breach of implied warranty of merchantability²⁶; and (7) breach of implied warranty of fitness for a particular purpose.²⁷ The complaint requested compensatory and punitive damages. Several of the claims, as well as Defendants Smith & Wesson Corp., Smith & Wesson Holding Company, and Cabela's Wholesale, LLC, were dismissed without prejudice though stipulated motions.²⁸

¹⁹ Motion for Summary Judgment at 11; Stratton Depo at 85:12–87:2

²⁰ Complaint, [docket no. 2](#), filed June 18, 2018. Plaintiff originally filed suit against “Cabela’s, Inc.” but that party was replaced with Cabela’s Wholesale, LLC in July 2018. First Amended Complaint, [docket no. 17](#), filed July 9, 2018.

²¹ Complaint at 5.

²² *Id.*

²³ *Id.*

²⁴ *Id.* at 6.

²⁵ *Id.* at 7.

²⁶ *Id.*

²⁷ *Id.* at 8.

²⁸ Order Granting [42] Joint Motion to Change Location of Holding Court for Pretrial Matters from St. George to Salt Lake City; and Deferring Ruling in Part, Granting in Part, and Denying in Part [26] Defendants Thompson/Center Arms, Smith & Wesson Corp., and Smith & Wesson Holding Company’s Partial Motion to Dismiss Pursuant to Rules 12(B)(2) and 12(B)(6), [docket no. 50](#), filed October 11, 2018; Order Granting Dismissal of Defendants Smith & Wesson Corp. and Smith & Wesson Holding Company Without Prejudice, [docket no. 62](#), filed January 11, 2019; Order Dismissing Cabela’s Wholesale, LLC, [docket no. 81](#), filed November 20, 2019.

On December 10, 2021,²⁹ Thompson filed its Motion for Summary Judgment and Motion to Preclude. Plaintiff filed responses to the Motion for Summary Judgment³⁰ and the Motion to Preclude.³¹ And Thompson filed replies in support of the Motion for Summary Judgment³² and the Motion to Preclude.³³

DISCUSSION

The Motion for Summary Judgment

Summary judgment is only appropriate if “there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.”³⁴ A factual dispute is genuine when “there is sufficient evidence on each side so that a rational trier of fact could resolve the issue either way”³⁵ or “if a reasonable jury could return a verdict for the nonmoving party.”³⁶ A fact is material if “it is essential to the proper disposition of [a] claim.”³⁷ In ruling on a motion for summary judgment, the factual record and all reasonable inferences drawn therefrom are viewed in the light most favorable to the nonmoving party.³⁸

²⁹ On that same day, Plaintiff and Thompson filed eight other motions in limine and motions to preclude experts. Those motions will be addressed in a separate order.

³⁰ Opposition to Summary Judgment.

³¹ Plaintiff’s Opposition to Defendant’s Motion to Preclude Plaintiff’s Expert Charles Powell, [docket no. 174](#), filed January 26, 2022.

³² Reply in Support of Defendant’s Motion for Summary Judgment, [docket no. 183](#), filed February 9, 2022.

³³ Reply in Support of the Motion to Preclude Plaintiff’s Expert Charles Powell, [docket no. 182](#), filed February 9, 2022.

³⁴ [Fed. R. Civ. P. 56\(a\)](#).

³⁵ *Adler v. Wal-Mart Stores, Inc.*, 144 F.3d 664, 670 (10th Cir. 1998).

³⁶ *Universal Money Ctrs., Inc. v. Am. Tel. & Tel. Co.*, 22 F.3d 1527, 1529 (10th Cir. 1994) (citation and internal quotation marks omitted).

³⁷ *Adler*, 144 F.3d at 670.

³⁸ *Id.*

The parties and claims which were previously dismissed without prejudice will be dismissed with prejudice

On October 11, 2018, Plaintiff's Fifth Cause of Action for breach of implied warranty for a particular purpose and Plaintiff's failure to warn claims were dismissed without prejudice.³⁹ On January 11, 2019, Plaintiff's stipulated motion to dismiss Defendants Smith & Wesson Corp. and Smith & Wesson Holding Company without prejudice was granted.⁴⁰ On November 20, 2019, Defendant's stipulated motion to dismiss Defendant Cabela's Wholesale, LLC was granted.⁴¹ Thompson seeks to convert these dismissals *without prejudice* to dismissals *with prejudice* because the deadlines for Plaintiff to amend pleadings and conduct discovery have now expired.⁴² Plaintiff does not oppose the motion to dismiss the parties with prejudice or the motion to dismiss the failure to warn claim with prejudice.⁴³ Plaintiff does not address the motion in regards to the breach of implied warranty of fitness for a particular purpose; however, as previously noted, that claim was dismissed without prejudice and the time to amend has passed.⁴⁴ Therefore, Plaintiff's claims for failure to warn and breach of implied warranty for a particular purpose, and Defendants Smith & Wesson Corp., Smith & Wesson Holding Company, and Cabela's Wholesale, LLC, are dismissed with prejudice.

³⁹ Order Granting [42] Motion to Change Location of Holding Court for Pretrial Matters from St. George to Salt Lake City; and Deferring Ruling in Part, Granting in Part, and Denying in Part [26] Defendants Thompson/Center Arms, Smith & Wesson Corp., and Smith & Wesson Holding Company's Partial Motion to Dismiss Pursuant to Rules 12(b)(2) and 12(b)(6).

⁴⁰ Order Granting Dismissal of Defendants Smith & Wesson Corp. and Smith & Wesson Holding Company Without Prejudice.

⁴¹ Order Dismissing Cabela's Wholesale, LLC.

⁴² Motion for Summary Judgment at 13-14.

⁴³ Opposition to Summary Judgment at 4.

⁴⁴ See Order Granting [42] Motion to Change Location of Holding Court for Pretrial Matters from St. George to Salt Lake City; and Deferring Ruling in Part, Granting in Part, and Denying in Part [26] Defendants Thompson/Center Arms, Smith & Wesson Corp., and Smith & Wesson Holding Company's Partial Motion to Dismiss Pursuant to Rules 12(b)(2) and 12(b)(6).

Summary judgment will be granted on Plaintiff's manufacturing defect claims, and request for punitive damages

Thompson seeks summary judgment on Plaintiff's manufacturing defect claims and Plaintiff's request for punitive damages. Specifically, Thompson argues that (1) Plaintiff's manufacturing defect claims fail because it is undisputed that Subject Rifle was manufactured in accordance with its specifications⁴⁵ and (2) Plaintiff's punitive damages claim fails because there is no evidence that Thompson acted with deliberate indifference to a risk of bodily harm.⁴⁶ Plaintiff does not oppose summary judgment on those claims.⁴⁷ Accordingly, summary judgment will be granted in favor of Thompson on Plaintiff's claims for manufacturing defects and for punitive damages. Those claims will be dismissed with prejudice.

Summary judgment will be denied on Plaintiff's design defect claims.

Thompson moves for summary judgment on Plaintiff's design defect claims. Thompson's sole basis for this argument is that an expert witness is required to establish a design defect. It contends that because Plaintiff's expert, Charles Powell, should be precluded from testifying, Plaintiff's claim necessarily fails.⁴⁸ As further detailed *infra*, Mr. Powell will be permitted to provide expert testimony on the materials failure of the Subject Rifle. Therefore, summary judgment on Plaintiff's design defect claim is denied.

Summary judgment will be denied on Plaintiff's breach of express warranty claims

In the sale of the Subject Rifle, Thompson provided a warranty for the "lifetime of the original consumer purchaser."⁴⁹ Thompson moves for summary judgment on Plaintiff's breach

⁴⁵ *Id.* at 15-16.

⁴⁶ *Id.* at 21-24.

⁴⁷ Opposition to Summary Judgment at 4.

⁴⁸ *Id.* at 14-15.

⁴⁹ Omega Manual (2 of 2) at 1.

of express warranty claim, arguing that Plaintiff is not entitled to this warranty because he was not the original consumer purchaser.⁵⁰ Because Utah Code § 70A-2-318 requires a seller's express warranty to extend to any person who may reasonably be expected to use a good, summary judgment will be denied.

Utah Code § 70A-2-318 states that:

A seller's warranty whether express or implied extends to any person who may reasonably be expected to use, consume, or be affected by the goods and who is injured by breach of the warranty. A seller may not exclude or limit the operation of this section with respect to injury to the person of an individual to whom the warranty extends.⁵¹

This language is derived from § 2-313 of the Uniform Commercial Code; specifically, “Alternative C” of that code.⁵² Courts in states which have adopted similar statutes have concluded this language prevents a seller of goods from excluding any person who may reasonably be expected to use those goods from a warranty.⁵³

In *Stroklund v. Thompson/Center Arms*, the United States District Court for the District of North Dakota, applying North Dakota law,⁵⁴ held the question of whether an identical warranty extended to a secondhand purchaser was for the jury.⁵⁵ In that case, a purchaser of a secondhand gun, originally manufactured by Thompson, brought a claim against Thompson for

⁵⁰ Motion for Summary Judgment at 20-21.

⁵¹ [Utah Code Ann. § 70A-2-318](#).

⁵² Gary E. Sullivan & Braxton Thrash, *Purchasers Lacking Privity Overcoming "The Rule" for Express Warranty Claims: Expanding Judicial Application of Common Law Theories and Liberal Interpretation of U.C.C. Section 2-318*, 5 Drexel L. Rev. 49, 61 (2012)

⁵³ *Disher v. Tamko Bldg. Prod., Inc.*, No. 14-CV-740-SMY-SCW, 2015 WL 4609980, at *9 (S.D. Ill. July 31, 2015) (applying Colorado law). While Colorado has adopted a modified version of “Alternative B” of § 2-313, the language of “Modified Alternative B” is substantially similar to Alternative C, and is comparable for the purpose of this analysis. See Sullivan and Thrash, *supra* at 63-64, 97.

⁵⁴ North Dakota, like Utah, has adopted Alternative C of UCC § 2-313. Accordingly, the *Stroklund* court's analysis is persuasive here.

⁵⁵ *Stroklund v. Thompson/Ctr. Arms Co.*, No. 4:06 CV-08, 2007 WL 4191740, at *7 (D.N.D. Nov. 21, 2007).

breach of express warranty.⁵⁶ Thompson argued that its warranty, which (like the warranty at issue here) was “for the LIFETIME OF THE ORIGINAL PURCHASER,” did not apply to subsequent purchasers. Chief Judge Hovland rejected that argument, stating that the “plain language of [Alternative C] provides that the question of to whom an express or implied warranty extends is a question of who may reasonably be expected to use, consume, or be affected by the goods, and as such is a question for the jury to resolve at trial.”⁵⁷

If a jury finds that Plaintiff would reasonably be expected to use, contribute, or be affected by the goods, Plaintiff would be entitled to the benefits of the warranty, irrespective of the limitation in the warranty. Anything that enters into commerce may reasonably be expected to be resold and used. Therefore, whether this warranty applies is a question for the jury at trial, unless trial testimony makes it so clear that the issue may be determined as a matter of law.

Thompson argues that because Plaintiff admits he did not read the warranty until he purchased the Subject Rifle from Glazier, the warranty was not the basis of the bargain, and Plaintiff cannot assert a breach of warranty claim. But as the Maryland Court of Appeals noted, this argument ignores “the circumstances surrounding most purchases in modern commercial dealing,” where warranties are typically *not* disclosed prior to sale.⁵⁸ Comment 7 to Utah Code Ann. § 70A-2-313, which provides the statutory basis for the creation of express warranties in Utah, states that “[t]he precise time when words of description or affirmation are made or samples are shown is not material. The sole question is whether the language or samples or models are fairly to be regarded as part of the contract.”⁵⁹ Due to the nature of commercial

⁵⁶ *Id.* at *7.

⁵⁷ *Id.* at *8 (citation and internal quotation marks omitted).

⁵⁸ See *Rite Aid Corp. v. Levy-Gray*, 391 Md. 608, 625 (Md. 2006).

⁵⁹ Utah Code Ann. § 70A-2-313, Comment 7.

dealings in the modern world, “courts are recognizing that later statements found in [written warranties delivered after the contract is made] are part of the basis of the bargain.”⁶⁰ A jury could find that the warranty in this case was part of the basis of the bargain.⁶¹

Finally, Thompson argues in its reply that Plaintiff’s breach of express warranty claim is duplicative of Plaintiff’s other claims.⁶² While this argument may or may not have merit, it was raised for the first time in a reply brief. Therefore, consideration of this argument is not appropriate at this time.⁶³

The Motion to Preclude

Plaintiff designated Charles Powell to provide expert testimony on the cause of the Subject Rifle explosion. Mr. Powell is a registered professional engineer who has extensive experience in material failure analysis and has conducted numerous evaluations of firearm explosions. Thompson moves to preclude his testimony on several grounds, arguing that he is not qualified to opine on warnings, ballistics, and tool markings;⁶⁴ that his methods are not reliable;⁶⁵ and that it would be prejudicial to allow him to testify to other firearm explosions.⁶⁶

The objected-to portions of Mr. Powell’s proposed testimony can be divided into four topic areas. Those topics include:

1. Challenges to Mr. Powell’s qualifications to testify to the condition of the Subject Bullet;

⁶⁰ § 2-313:70 Post sale statements—Post sale statements as a part of the “basis of the bargain”, [3 Anderson U.C.C. § 2-313:70](#) (3d. ed.)

⁶¹ As the case develops towards and into trial, this issue may be resolved as a matter of law before it goes to the jury.

⁶² Reply in Support of Defendant’s Motion for Summary Judgment at 8.

⁶³ *Rodriguez v. Cascade Collections LLC*, 532 F. Supp. 3d 1099, 1119 (D. Utah 2021).

⁶⁴ Motion to Preclude at 3-5.

⁶⁵ *Id.* at 5-10.

⁶⁶ *Id.* at 10-11.

2. Challenges to Mr. Powell's qualifications to testify to warnings;
3. A general reliability challenge to Mr. Powell's methods in coming to his conclusions;
and
4. An objection to any testimony regarding other instances of Thompson-manufactured firearms exploding.

Mr. Powell is qualified to provide testimony in the fields of metallurgic engineering and internal ballistics. He is not qualified in the fields of external and terminal ballistics, tool markings, or warnings. Accordingly, he will be permitted to testify to opinions which are based in his areas of expertise, the specifics of which are described *infra*. Additionally, Mr. Powell's methods are sufficiently reliable. Finally, any mention of other firearm explosions which are not based on Mr. Powell's personal knowledge would be unduly prejudicial.

Standard for decision on expert witness testimony

Federal Rule of Evidence 702 provides that:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if: (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.⁶⁷

A district court is the "gatekeeper" of expert testimony, charged with making the initial determination as to whether an expert's testimony is both reliable and relevant.⁶⁸ Because the Federal Rules of Evidence favor the admissibility of expert testimony, preclusion of

⁶⁷ Fed. R. Evid. 702.

⁶⁸ *Tudor v. Se. Oklahoma State Univ.*, 13 F.4th 1019, 1029 (10th Cir. 2021).

experts “is the exception rather than the rule.”⁶⁹ A court sitting as a gatekeeper is not meant to usurp the role played by the jury in weighing expert testimony.⁷⁰ “Vigorous cross-examination [and] presentation of contrary evidence” is the most appropriate way to attack “shaky but admissible evidence.”⁷¹

Mr. Powell is qualified to testify on the Subject Bullet insofar as his testimony is based off his expertise in internal ballistics, but not external and terminal ballistics

Thompson challenges the opinions Powell offers on the condition of the recovered Subject Bullet. Specifically, Thompson argues that Powell is not qualified to offer testimony on external ballistics (“the [behavior of the] bullet once it leaves the barrel”),⁷² terminal ballistics (“the performance of the bullet once it hits something”),⁷³ or firearm tool markings. Thompson argues that Powell’s testimony regarding the Subject Bullet is based on these fields. Thompson does not challenge Powell’s status as an expert in “internal ballistics,” which relates to the behavior of a bullet while still inside the barrel of a rifle.⁷⁴ Mr. Powell has extensive experience in forensic analysis of firearms.⁷⁵ Therefore, for the purpose of this order, it is assumed that Mr. Powell is qualified to testify on the field of internal ballistics.

⁶⁹ *Mickelsen v. Aramark Sports & Ent. Servs.*, 536 F. Supp. 3d 1238, 1241 (D. Utah 2021) (quoting Fed. R. Evid. 702, Advisory Committee Notes).

⁷⁰ *United States v. Frazier*, 387 F.3d 1244, 1272 (11th Cir. 2004).

⁷¹ *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 596 (1993).

⁷² Charles Powell’s Deposition 7/30/20, Exhibit F to Motion for Summary Judgment (“Powell Depo.”), [docket no. 154-6](#), filed December 10, 2021, at 75:24-76:4.

⁷³ *Id.*

⁷⁴ See Motion to Preclude at 4.

⁷⁵ Charles Powell’s SSEC Engineering Report dated December 3, 2019, Exhibit B to Motion to Preclude (“Powell Report”), [docket no. 154-2](#), filed December 10, 2021, at 3; Powell Depo. at 11:17-19.

Mr. Powell offers the following expert analysis regarding the condition of the Subject Bullet, after it was recovered from the tree where it was found embedded:⁷⁶ 1) discussion of “land and groove marks” on the Subject Bullet and further discussion of its trajectory while inside the barrel of the Subject Rifle;⁷⁷ 2) discussion of the expansion of the Subject Bullet while inside the barrel of the subject rifle⁷⁸; 3) discussion of whether the Subject Bullet contacted a ramrod or other object before it struck a tree, including a conclusion that the “recovered bullet evidence shows that no barrel obstruction was present”;⁷⁹ and 4) discussion of “crush tests” conducted to analyze the bullet’s impact with objects, including discussion of crush tests conducted by experts for Thompson⁸⁰ and a crush test where Powell “compressed two exemplar 300 grain Harvester Scorpion PT Gold bullets into an oak block”⁸¹ and compared the result with the Subject Bullet.

Despite Mr. Powell’s experience and training in analyzing firearm explosions,⁸² his CV and publications contain no reference to external ballistics, terminal ballistics, or tool mark analysis.⁸³ Mr. Powell has not described any special skills or training concerning ballistics or tool marks. He testified at his deposition that he believed he had previously conducted tool mark analysis for the Oklahoma State Bureau of Investigation, and had been qualified to give expert

⁷⁶ Powell Report at 9-11; Charles Powell’s SSEC Supplemental Engineering Report dated March 18, 2020, Exhibit C to Motion to Preclude (“Powell First Supplemental Report”), [docket no. 154-3](#), filed December 10, 2021, at 5-7.

⁷⁷ Powell Report at 9.

⁷⁸ Powell First Supplemental Report at 6.

⁷⁹ Powell Report at 11.

⁸⁰ Powell First Supplemental Report at 5.

⁸¹ *Id.* at 5-6.

⁸² Powell Report at 3.

⁸³ *Id.* at 18-23.

testimony on the subject in the past.⁸⁴ But a belief concerning some indeterminate past experience with ballistics does not alone qualify him as an expert.⁸⁵ Therefore, Mr. Powell's qualification to offer expert opinion on these matters is limited. The parameters of Mr. Powell's admissible expert testimony is discussed more thoroughly below.

Markings on the Subject Bullet

Thompson argues that Mr. Powell should be precluded from testifying about the markings on the Subject Bullet, including the land and groove marks. This argument is based on Mr. Powell's lack of certification by the Association of Firearm and Tool Mark Examiners and Mr. Powell's purported lack of credentials or education as a "firearm/tool mark examiner."⁸⁶ The usual work of a firearm/tool mark examiner is to match a recovered bullet to a specific firearm.⁸⁷ First, a "lack of formal certification by a professional organization—although relevant to [Mr. Powell's] expertise—is not dispositive [because] Rule 702 'does not require any particular imprimatur.'"⁸⁸ Second, Mr. Powell has extensive experience analyzing the cause of firearm explosions, and Thompson has not challenged his expertise in this area or in internal ballistics.⁸⁹ Mr. Powell's lack of training in the field of tool mark analysis should not prevent his testimony insofar as the testimony is based on his unchallenged expertise in internal ballistics. Mr. Powell may testify to the land and groove markings on the Subject Bullet which were caused before it left the rifle barrel. He may also offer testimony on whether these markings reveal that the

⁸⁴ Powell Depo. at 79:22-80:24.

⁸⁵ See *Shreve v. Sears, Roebuck & Co.*, 166 F. Supp. 2d 378, 391 n.7 (D. Md. 2001).

⁸⁶ Motion to Preclude at 4-5; Reply in Support of the Motion to Preclude Plaintiff's Expert Charles Powell at 3.

⁸⁷ *United States v. Shipp*, 422 F. Supp. 3d 762, 770 (E.D.N.Y. 2019). It does not appear disputed that the Subject Bullet came from the Subject Rifle.

⁸⁸ *United States v. Muro*, 784 F. App'x 160, 162 (4th Cir. 2019) (quoting *United States v. Gutierrez*, 757 F.3d 785, 788 (8th Cir. 2014)).

⁸⁹ See Powell Report at 3; Powell Depo. at 11:17-19.

Subject Bullet expanded while inside the rifle. But Mr. Powell may not testify that he was able to match the Subject Bullet to the Subject Rifle using tool mark analysis or regarding markings or deformation caused after the Subject Bullet's exit from the Subject Rifle's barrel.

Analysis of Subject Bullet's terminal impact.

Thompson also challenges Mr. Powell's proposed testimony on the shape of and impacts to the Subject Bullet caused by it striking objects. As part of his report, Mr. Powell opines about the cause of the rifle explosion based on his analysis of the shape of the Subject Bullet and exemplar bullets that had been fired into objects.⁹⁰ But Mr. Powell conceded during his deposition that he is not an expert in the fields of external ballistics, which he defined as relating to "the bullet once it leaves the barrel," or an expert in the field of terminal ballistics, which he defined as relating to "the performance of the bullet once it hits something".⁹¹ Because Mr. Powell admits that he lacks expertise in analyzing the behavior of bullets upon hitting an object, he is not qualified to opine on the effect on a bullet resulting from the bullet's contact with an object. Analysis of the condition of a bullet due to striking an object squarely implicates the field of terminal ballistics. Therefore, Mr. Powell may not offer expert testimony on the condition of the Subject Bullet, insofar as he is testifying to bullet deformity caused by the bullet striking an object. This includes discussion of (1) crush tests, including the shape of bullets Mr. Powell fired into oak blocks, (2) the appearance a bullet has after contacting a ramrod, (3) whether the expansion of the Subject Bullet was caused by an impact with a tree, and (4) whether the shape of the Subject Bullet reveals that it did or did not strike a barrel obstruction. Mr. Powell also may not testify regarding bullet trajectory.

⁹⁰ Powell First Supplemental Report at 5-6.

⁹¹ Powell Depo. at 75:24-76:4.

Mr. Powell may, however, testify regarding the condition of the Subject Bullet, insofar as that condition is based on his knowledge of and expertise in internal ballistics, such as the Subject Bullet's behavior while inside the barrel of the Subject Rifle. This includes the barrel causing certain markings on a bullet, even after the bullet strikes an external object. Defendant is incorrect that *any* discussion of the condition of the bullet is too closely linked to terminal ballistics for Mr. Powell to offer expert testimony. But cross-examination on Mr. Powell's specific qualifications will be permitted at trial.

Mr. Powell's general expertise in mechanical engineering and material failure analysis do not qualify him to testify to opinions regarding external or terminal ballistics.

Plaintiff contends that Mr. Powell's general expertise in mechanical engineering and material failure analysis qualify him to testify to all conclusions in his report regarding the Subject Bullet, including those after it exited the barrel of the Subject Rifle. Plaintiff argues that Mr. Powell's testimony is based on "general engineering principles rather than specific ballistic principles."⁹² Mr. Powell is certainly well-qualified in the fields of mechanical and metallurgical engineering. However, expertise in one area "does not *ipso facto* qualify [Mr. Powell] to testify as an expert in all related areas."⁹³ "Unless he is to testify only to general engineering principles that any mechanical engineer would know, [an] engineer must possess 'some special skill, knowledge, or experience,' concerning the particular issue before the court."⁹⁴

Principles of ballistics are not "general engineering principles that any mechanical engineer would know"⁹⁵ While Mr. Powell has expertise in general engineering principles

⁹² Plaintiff's Opposition to Defendant's Motion to Preclude Plaintiff's Expert Charles Powell at 15.

⁹³ *Shreve*, 166 F. Supp. 2d at 391 (D. Md. 2001).

⁹⁴ *Id.* at 392 (citation omitted).

⁹⁵ *Id.* at 392.

and internal ballistics, that is not sufficient to allow him to testify to the related fields of external ballistics, terminal ballistics, and firearm tool marks analysis.

Mr. Powell is not precluded from offering testimony at trial on 1) “land and groove marks” on the Subject Bullet and further discussion of its trajectory while inside the barrel of the Subject Rifle;⁹⁶ and 2) discussion of the expansion of the Subject Bullet while inside the barrel of the subject rifle⁹⁷. Mr. Powell is precluded from offering testimony on 3) whether the Subject Bullet contacted a ramrod or other object before it struck a tree, including a conclusion that the “recovered bullet evidence shows that no barrel obstruction was present”;⁹⁸ and 4) “crush tests” conducted to analyze the bullet’s impact with objects, including discussion of crush tests conducted by experts for Thompson⁹⁹ and a crush test where Powell “compressed two exemplar 300 grain Harvester Scorpion PT Gold bullets into an oak block”¹⁰⁰ and compared the result with the Subject Bullet.

Mr. Powell may not offer expert testimony on warnings

For an expert to be “qualified” under Federal Rule of Evidence 702, the expert must possess some specialized “knowledge, skill, experience, training, or education” in the relevant field.¹⁰¹ Thompson argues that Mr. Powell is not qualified to offer expert opinions on warnings under Rule 702.¹⁰² Plaintiff does not contest that Mr. Powell is not qualified to testify regarding warnings. Therefore, Mr. Powell will not be permitted to offer expert testimony on warnings.

⁹⁶ Powell Report at 9.

⁹⁷ Powell First Supplemental Report at 6.

⁹⁸ Powell Report at 11.

⁹⁹ Powell First Supplemental Report at 5.

¹⁰⁰ *Id.* at 5-6.

¹⁰¹ [Fed. R. Evid. 702](#).

¹⁰² Motion to Preclude at 3-5.

Mr. Powell's opinions are reliable because his conclusions were supported by objective data and characterized by an appropriate degree of intellectual rigor

Thompson argues that Mr. Powell's opinions must be excluded because they are unreliable under Federal Rule of Evidence 702 and *Daubert*.¹⁰³ Mr. Powell's opinions are reliable, and therefore, the testimony for which he is qualified as an expert will not be excluded.

For a court to find that an expert's methods are reliable, the proponent "must show that the method employed by the expert in reaching the conclusion is scientifically sound and the opinion is based on facts which sufficiently satisfy Rule 702's reliability requirement."¹⁰⁴ In assessing reliability, "a trial court's focus generally should not be upon the precise conclusions reached by the expert, but on the methodology employed in reaching those conclusions."¹⁰⁵

The Supreme Court has identified as relevant certain factors a court may consider in assessing the reliability of an expert's methods: (1) whether a theory can or has been tested; (2) whether the theory has been subject to peer review or publication; (3) whether there are known or potential rates of error regarding specific techniques, and (4) whether the theory has been generally accepted in the relevant scientific community.¹⁰⁶ The Tenth Circuit has "made clear," however, that these factors are "neither definitive nor exhaustive" in assessing reliability.¹⁰⁷ Certain methods or theories are not susceptible to all or even any of these factors. The key inquiry is not necessarily whether an expert's methods can meet all the above factors, but rather whether the link between the expert's methods and conclusions is characterized by an

¹⁰³ Motion to Preclude at 5-10.

¹⁰⁴ *Bitler v. A.O. Smith Corp.*, 400 F.3d 1227, 1233 (10th Cir. 2005) (quoting *Mitchell v. Gencorp Inc.*, 165 F.3d 778, 781 (10th Cir. 1999)).

¹⁰⁵ *Bitler*, 400 F.3d at 1233.

¹⁰⁶ See *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 149-150 (1999).

¹⁰⁷ *Bitler*, 400 F.3d at 1233.

appropriate level of intellectual rigor.¹⁰⁸ The above factors may be relevant in assessing whether that is the case, but they are certainly not the beginning and the end of a court's gatekeeping function.¹⁰⁹

A review of Mr. Powell's report demonstrates his conclusions are based on scientifically supported tests and objective data, and his methods are characterized by an appropriate degree of intellectual rigor. Mr. Powell concluded that the causes of the Subject Rifle's failure were the characteristics of the 1137 metal, which contains manganese¹¹⁰ sulfide inclusions, and the notches cut into the rifle. Mr. Powell observed physical evidence—the remains of the Subject Rifle and Subject Bullet—and made these conclusions based on his extensive experience and technical knowledge of firearms and material failure analysis.¹¹¹ The Tenth Circuit has noted that observation based on experience and technical knowledge, “although . . . not susceptible to testing or peer review,” can be considered reliable if standard in a field.¹¹²

More than just relying on his experience, however, Mr. Powell also conducted a multitude of tests and examinations. Mr. Powell measured and photographed the Subject Bullet; scanned the Subject Rifle and Subject Bullet with an electron microscope; observed the propagation of the fracture; sampled the metal and analyzed its composition; measured the thickness of the metal; calculated the yield pressure of the barrel based on generally accepted

¹⁰⁸ *Kumho*, 526 U.S. at 152.

¹⁰⁹ While footnote five of Thompsons Motion to Preclude also argues that Mr. Powell's testimony on the Subject Bullet is unreliable because it is “not based on any authoritative source, testing, or data,” little argument was made and little discussion is needed in light of the previous analysis on Mr. Powell's qualification and the discussion of *Bitler v. A.O. Smith Corp* below. Mr. Powell's detailed examinations of the Subject Bullet and experience in the field are sufficient for a finding of reliability.

¹¹⁰ Both parties reference the inclusions as consisting of “magnesium sulfide.” A careful review of Mr. Powell's reports and deposition clarify the inclusions are in fact “manganese sulfide.” See Powell Report at 5; Powell Depo at 164:17-24.

¹¹¹ Powell Depo. at 22:10-20; 23:6-12.

¹¹² *Bitler*, 400 F.3d at 1235.

mathematical equations; and measured the pressure exerted when exemplar rifles were fired.¹¹³

Thompson does not contend that any of these tests or methods are unreliable or are not standard in the field of material failure analysis. And Mr. Powell stated that he conducted these tests and methods in accordance with applicable standards.¹¹⁴ On this record, and under the circumstances, sufficient indicia of reliability are present such that Mr. Powell's methods appear "scientifically sound."

Thompson argues that because Mr. Powell "had no objective validation for his opinion" and his conclusions were not testable or falsifiable, his opinions should be excluded.¹¹⁵ This argument is not persuasive.

First, Mr. Powell did have objective validation for his opinions. As noted previously, Mr. Powell conducted extensive tests, including scanning the rifle with an electron microscope to observe crack propagation and comparing the yield strength of the metal to the force exerted when the rifle was fired.¹¹⁶ These tests were well documented, and attack on them is best suited for cross-examination.

Thompson suggests that because Mr. Powell was not able to create a rifle explosion through acts of normal firing, his own testing contradicts his theory.¹¹⁷ But this mischaracterizes Mr. Powell's theory. Mr. Powell is not opining that the 1137 steel will cause a rifle to explode every time it is fired, or that even every rifle made with that steel will eventually explode.

¹¹³ Powell Report at 5-9, 12-16.

¹¹⁴ Powell Depo. at 24:10-25:6, 135:3-6. Thompson argues that Mr. Powell could not cite the correct American Society for Testing and Materials standards, but that argument goes to the weight, not the admissibility, of his testimony.

¹¹⁵ Motion to Preclude at 6-7.

¹¹⁶ Powell Report at 5-7.

¹¹⁷ Motion to Preclude at 9-10.

Instead, Mr. Powell is opining that the nature of 1137 steel will cause a rifle made with that steel to have an increased risk of cracking. For a rifle to fail under Mr. Powell's theory, several factors need to be present: "you have to have a certain number of brittle inclusions, you have to have them in a certain critical area, and you have to have [a number of] loads fired."¹¹⁸ As counsel for Thompson noted in Mr. Powell's deposition, Powell is not suggesting "that every 1137 muzzleloader barrel is going to fail[.]"¹¹⁹ Reproduction of an accident is not a requirement for an expert to opine on the cause of the accident; not every accident is susceptible to easy reproduction.¹²⁰ Therefore, Mr. Powell's testing does not contradict his theory.

Second, even if Mr. Powell had not physically tested his theory, that would not necessarily be dispositive of the gatekeeping inquiry. On the contrary, the Tenth Circuit held in *Bitler v. A.O. Smith Corp* that "testing is not necessary in all instances to establish reliability under *Daubert*," and failure to test does not preclude a finding of reliability.¹²¹ Regardless, Mr. Powell *did* test this theory, by measuring the force exerted by the firing of exemplars, and concluded that the pressure exerted by firing the Subject Rifle could exceed the strength of the metal and initiate cracking.¹²² And Mr. Powell observed a possible crack in an exemplar rifle after firing.¹²³

This is not a situation where an expert's conclusions are supported only by his own *ipse dixit*. In reaching his conclusions, Mr. Powell conducted numerous tests and analysis, which

¹¹⁸ Charles Powell's Deposition (Volume II) 9/30/21, Exhibit G to Motion for Summary Judgment ("Powell Depo. Vol. II"), [docket no. 154-7](#), filed December 10, 2021, at 299:13-17.

¹¹⁹ *Id.* at 299:6-10.

¹²⁰ See *Navelski v. Int'l Paper Co.*, 244 F. Supp. 3d 1275, 1290-91 (N.D. Fla. 2017).

¹²¹ *Bitler*, 400 F.3d at 1236.

¹²² Powell Depo. at 109:20-24.

¹²³ Powell Report at 40.

followed applicable standards and were based on his experience in the field. Thompson's arguments primarily do not attack the "core science"¹²⁴ undergirding Mr. Powell's methods. Rather, Thompson takes issue with the conclusions Mr. Powell draws: that the relative weakness of the steel was the cause of the rifle explosion. Mr. Powell has adequately drawn a link between the methods he employed and the conclusions he reached. An attack on those conclusions is best left for cross-examination or counter-expert testimony at trial. "[D]isagreements with the expert's conclusions go not to admissibility but to the weight and credibility of the evidence—questions for the jury to decide."¹²⁵

Therefore, Mr. Powell's methods underpinning his conclusions on the material failure of the Subject Rifle are reliable for purposes of Rule 702.

Mr. Powell may not testify to other lawsuits involving this particular type of firearm exploding

In a supplemental report, Mr. Powell lists other claims against Thompson involving ruptured 1137 steel barrels, and states those incidents are substantially similar.¹²⁶ However, Mr. Powell admitted during his deposition that he has no personal knowledge of the vast majority of incidents, and is unaware if they were caused by misuse.¹²⁷ Thompson argues that Mr. Powell should not be permitted to testify to these other claims. Plaintiff does not contest this, but instead suggests that if Mr. Powell is precluded from testifying that there were other incidents involving

¹²⁴ *Bitler*, 400 F.3d at 1236.

¹²⁵ *United States v. Hoyt*, No. 2:14CR00001, 2014 WL 5023093, at *2 (W.D. Va. Oct. 8, 2014) (citing *United States v. Nichols*, 169 F.3d 1255, 1263 (10th Cir.1999)).

¹²⁶ Powell First Supplemental Report at 2-3.

¹²⁷ See Powell Depo. at 139:17-154:16.

1137 steel rifles exploding, Thompson cannot argue to the jury that there were no other similar incidents.¹²⁸

Federal Rule of Evidence 403 allows a court to exclude evidence if the probative value of that evidence is substantially outweighed by the danger of unfair prejudice or confusing the jury.¹²⁹ Here, any probative value of Mr. Powell's testimony concerning other incidents is low because he has no direct knowledge of any of the causes of barrel failures in other incidents. For example, all other failures could have been caused by improper loading of ammunition. Comparatively, the prejudicial effect of such evidence, and the danger of a jury giving that evidence undue weight, is high. Therefore, Mr. Powell may not testify regarding other lawsuits where there are allegations of this type of firearm exploding, unless he has personal knowledge of the incidents.

Plaintiff's argument that Thompson should also be precluded from arguing to the jury that there are no other incidents of 1137 steel rifle barrels exploding is well-founded. If Thompson successfully elicits testimony at trial that there were no other incidents of 1137 steel barrels exploding, the door is opened, and Plaintiff might then refer to other instances of this type of gun exploding, including other lawsuits. However, such an attempt by Thompson could be objectionable under [Fed. R. Evid. 403](#).

CONCLUSION AND ORDER

For the foregoing reasons, IT IS HEREBY ORDERED:

1. Thompson's Motion for Summary Judgment is GRANTED on Plaintiff's claims for
 - a. Failure to warn;

¹²⁸ Plaintiff's Opposition to Defendant's Motion to Preclude Plaintiff's Expert Charles Powell at 16.

¹²⁹ Fed. R. Evidence 403.

- b. Manufacturing defect;
- c. Breach of implied warranty for a particular purpose; and
- d. Punitive damages.

These claims are dismissed with prejudice.

2. Thompson's Motion for Summary Judgment is DENIED on all other claims, including:

Cause of Action 1: Strict liability design defect;

Cause of Action 2: Negligent design defect;

Cause of Action 3: Breach of express warranties; and

Cause of Action 4: Breach of implied warranty of merchantability.

3. Thompson's Motion to Preclude is GRANTED IN PART and DENIED IN PART.

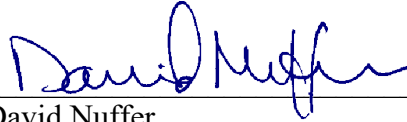
a. Mr. Powell may testify regarding the failure of the Subject Rifle based on his analysis of the barrel. He may also provide expert testimony on the Subject Bullet, insofar as his testimony is limited to the field of internal ballistics. This includes: 1) discussion of "land and groove marks" on the Subject Bullet and the Subject Bullet's trajectory while inside the barrel of the Subject Rifle; and 2) discussion of the expansion of the Subject Bullet while inside the barrel of the subject rifle.

b. Mr. Powell is precluded from offering expert testimony based on external ballistics, terminal ballistics, and tool mark analysis, including 3) discussion of whether the Subject Bullet contacted a ramrod or other object before it struck a tree, and other discussion concerning objects the Subject Bullet may have struck besides the tree, and 4) discussion of "crush tests".

c. Also, Mr. Powell may not testify to other incidents involving muzzle-loading rifles exploding where he does not have personal knowledge of such incidents.

Dated May 2, 2022.

BY THE COURT:

A handwritten signature in blue ink, appearing to read "David Nuffer", is written over a horizontal line.

David Nuffer
United States District Judge